

What is claimed is:

1. A method of controlling a packet terminating call in a mobile communication system, comprising:

registering packet terminating call filtering information for at least one subscriber;

if a packet addressed to the subscriber as a destination is received, determining whether to set a terminating call of the received packet based on the registered packet terminating call filtering information; and

setting the terminating call according to a result of determination.

2. The method of claim 1, wherein the packet terminating call filtering information includes information indicating whether to activate use of a packet terminating call filtering function.

3. The method of claim 1, wherein the packet terminating call filtering information includes information indicating whether the packet terminating call filtering information includes a non-permission condition or a permission condition.

4. The method of claim 1, wherein the packet terminating call filtering information includes packet pattern information.

5. The method of claim 4, wherein the packet pattern information includes at least one of a specified source Internet protocol (IP), a specified protocol identifier (ID), and a destination port number.

6. The method of claim 4, wherein the packet pattern information includes at least one of a plurality of packet attributes recorded in a header of a packet.

7. The method of claim 6, wherein the packet attribute includes a source address and subnet mask.

8. The method of claim 6, wherein the packet attribute includes a protocol number (IPv4) / next header (IPv6).

9. The method of claim 6, wherein the packet attribute includes a destination port range.

10. The method of claim 6, wherein the packet attribute includes a source port range.

11. The method of claim 6, wherein the packet attribute includes an IPsec security parameter index (SPI).

12. The method of claim 6, wherein the packet attribute includes a type of service (TOS) (IPv4) / a traffic class (Ipv6) and mask.

13. The method of claim 6, wherein the packet attribute includes a flow label (IPv6).

14. The method of claim 1, wherein the packet terminating call filtering information is included in static information of a gateway general packet radio service (GPRS) support node (GGSN).

15. The method of claim 1, wherein the step of registering the packet terminating call filtering information comprises:

receiving a packet terminating call filtering information message from a mobile terminal of the subscriber;
and

registering the packet terminating call filtering information based on the received message.

16. The method of claim 1 or 15, further comprising:

receiving a packet terminating call filtering information inquiry and/or update message from a mobile terminal of a subscriber;

inquiring and/or updating the registered packet terminating call filtering information based on the inquiry and/or update message; and

transferring a result of inquiry and/or update to the mobile terminal.

17. The method of claim 1, wherein the step of registering the packet terminating call filtering information comprises:

authenticating a subscriber connected through the Internet;

receiving the packet terminating call filtering information message from the authenticated subscriber; and

registering the packet terminating call filtering information based on the received message.

18. The method of claim 1 or 17, further comprising:

receiving a packet terminating call filtering information inquiry and/or update message from an authenticated subscriber;

inquiring and/or updating the packet terminating call filtering information based on the inquiry and/or update message; and

transferring a result of inquiry and/or update to the authenticated subscriber.

19. An apparatus for controlling a packet terminating call in a mobile communication system, comprising:

a database which stores routing information and filtering information of a protocol data unit for a packet radio service;

a terminating call control section which controls a terminating call setting for the protocol data unit based on the routing information and the filtering information;

a message processing section which performs an inquiry and/or update of the filtering information based on an inquiry message and/or update message of the filtering information; and

an Internet protocol processing section which processes the protocol data unit and performs the terminating call setting procedure under control of the terminating call control section.

20. The apparatus of claim 19, further comprising:

an agent for providing the inquiry message and/or update message of the filtering information from an Internet subscriber and/or a mobile terminal; and

an Internet host, connected between the agent and the Internet, for enabling the Internet subscriber and/or mobile terminal to connect to the agent.